Potassium Iodide (KI) frequently asked questions.

What does KI have to do with Emergency Preparedness?

KI is used in certain situations to protect the thyroid gland from taking in radioactive iodine. If taken, in pill or dilute liquid form, prior to or within an hour of exposure to radioactive iodine, it can block approximately 90% of the radioactive iodine from being taken in by the thyroid gland. It should be noted that KI has no effect on exposure to any other form of radiation or radioactive material.

Does Kansas use KI for this purpose?

Kansas and Coffey County stock KI for use by emergency workers who may be directed into radioactive plumes or contaminated areas. Radiation exposure to the workers will be reduced through using KI in addition to monitoring external radiation and possibly wearing respirators. Stocks of KI are also available for special populations who might not be able to evacuate easily. Examples are hospitals, rest homes, and jails.

Does Kansas stock KI for the general public?

Kansas does not stock KI for the general public. Our protective action guides mirror those of most other states in that we plan to evacuate the general public who might be exposed to a radioactive release from a nuclear power plant or other source of radioactive iodine. Evacuation protects the public from all radioactive material that might be released including radioactive iodine. In the event of a projected short duration release or very unusual conditions that would make evacuation dangerous, the chosen protective action may be sheltering in your homes or businesses.

What about KI and the Chernobyl accident?

According to medical and scientific studies of the Chernobyl accident, most of the thyroid dose to the public came from eating food or drinking milk contaminated with radioactive iodine. One country provided a single dose of KI in liquid form to many of its residents several days after the release. Fortunately, that country had minimal contamination from the initial release of radioactive material. Kansas will take all necessary steps to prevent the public from ingesting food that exceeds national protective action guides for radioactive contamination.

What about KI and a “dirty bomb”?

In the event of a terrorist attack using a dirty bomb with radioactive iodine we would implement the same procedures as we would for the Wolf Creek or Cooper nuclear plants. The major exception is that in a terrorist scenario we would not have predefined emergency planning zones and would establish them based no conservative estimates of the potential health hazards.

Did Kansas make any changes in its protective actions following the new FDA guidance?

Kansas Protective Action Guides call for evacuation of the public if they might be exposed to 1 to 5 rem equivalent whole body exposure or 1 to 5 rem thyroid exposure. Kansas originally used 5 to 25 rem thyroid exposure to trigger evacuation. Based upon the FDA guidance, there is some medical risk to the thyroid from 5 rem of dose from radioactive iodine. Also, the World Health Organization recommends actions at 1 rem thyroid dose for certain populations. Therefore; Kansas reduced the action level for evacuation due to potential thyroid exposure.

Are there any risks to taking KI?

According the US Food and Drug Administration, there are minimum risks to taking the recommended dosage of KI to reduce thyroid exposure to radioactive iodine. Potential risks include an allergic reaction to the iodine and negative reaction to the potassium from certain prescription drugs. There are additional precautions for infants and mothers who are breast feeding infants.

Where can I get KI if I want to have it for my own protection?

KI is available without prescription. Not many drug stores or pharmacies carry the tablets, but they may be ordered through the internet. Shelf life varies from 3 to 10 years for bottles or foil strips of the tablets.

In simple terms how is Kansas going to protect the public in an event involving radiation or radioactive material?

Our position is we will evacuate the general public who might be exposed to a radioactive release from a nuclear power plant, terrorist attack, transportation accident or other event. Evacuation protects the public from <u>all</u> radioactive material that might be released including radioactive iodine. We would also protect the public from ingesting radioactive material by embargoing foodstuffs, which exceed protective action guides. We have stocks of KI for emergency workers who would be required to enter a radioactive plume and for members of the public who might not be able to evacuate (i.e. nursing homes, hospitals etc.)